Teaching Mathematics

The following letter from R.A. Staal, president of the Ontario Mathematics Commission, was published in the "Letters to the Editor" column of the *Globe and Mail* on April 21, 1968.

The Ontario Mathematics Commission, an independent, voluntary association founded in 1959, representing all aspects and levels of mathematics education in Ontario, is currently studying recent trends in education and their likely effect on mathematics teaching. In particular, it is concerned with possible outcomes of the Hall-Dennis Commission Report, *Living and Learning*. While the OMC supports the broad objectives of *Living and Learning*, it is of the opinion that some of the trends attributed to this report may have serious and undesirable consequences in the teaching of mathematics unless treated very cautiously.

One theme of *Living and Learning* is an approach to curriculum development which is based mainly on the current needs and interests of the child rather than on a subject-matter-oriented structuring. Our concern is that a carelessly "unstructured" approach to mathematics teaching may fail to account for the fact that mathematics is, by its nature, a strongly structured subject. Curriculum structuring may have been too rigid, but the tendency to regard structure as inherently undesirable is not acceptable.

Another theme of *Living and Learning* is a major reduction in the role of examinations. The report qualifies its remarks about examinations, but most public comment overlooks such reservations - the school of the future is already being pictured as being without structure and without examinations. Formal examinations may have been over-emphasized, but to abolish examinations is to fail to face the real issue of evaluation.

In mathematics it is useless for the student to try to proceed unless he both understands and can actually do things with the material which has gone before. Proper evaluation requires more than piecemeal testing of short units. We feel that the time has come in this public debate for the problems of structure and examinations to receive more serious consideration. Realistic comparative emphasis upon creativity and workmanship is urgently needed in public discussion of the foundations of educational policy.

Committees of the OMC and other bodies have given, for some time, serious thought to such matters as ungrading and a more varied and humane use of testing procedures. Groundwork has been laid in such reports as *Intermediate Mathematics Methodology*, published by the Ontario Institute for Studies in Education and written in cooperation with the OMC. In our view, the real value of the report will emerge with continuing scrutiny of it by such bodies as the OMC, endeavoring to extract what is both realistic and feasible.

> From Ontario Teachers' Federation Reporter May, 1969